

WHAT IS CLAIMED IS:

1. A control system comprising:

a signal processing unit;

a computation processing unit; and

a monitor processing unit,

wherein the signal processing unit, the computation processing unit, and the monitor processing unit mutually communicate data,

wherein the signal processing unit sends, to the computation processing unit and the monitor processing unit, signal data that indicates at least one of a state of a switch and a detection result of a sensor,

wherein the computation processing unit executes a computation using at least one of the signal data sent by the signal processing unit, signal data sent by other than the signal processing unit, and internal data, and then sends operation command data to an output processing unit and operation condition data to the monitor processing unit, and wherein the operation command data controls the output processing unit for activating at least one of an actuator and a load, wherein the operation condition data indicates that condition where an operation command trigger that activates an operation command target is effected,

wherein the monitor processing unit receives the signal data sent by the signal processing unit and stores the received signal data, and

wherein the monitor processing unit determines whether

abnormality is present, by comparing the stored signal data with the operation condition data received from the computation processing unit.

2. The control system according to Claim 1,
wherein the operation command trigger is one of a plurality of operation command triggers,

wherein the computation processing unit sends, to the monitor processing unit along with the operation condition data, operation trigger data indicating the operation command trigger, and

wherein the monitor processing unit determines whether abnormality is present by additionally considering the operation command trigger received from the computation processing unit.

3. The control system according to Claim 1,
wherein the signal processing unit sends, along with the signal data, timing information that specifies sending timing at which the signal data is sent,

wherein the monitor processing unit receives the timing information sent by the signal processing unit along with the signal data and stores the received timing information with correlating the timing information with the signal data, and

wherein the monitor processing unit determines whether abnormality is present by additionally considering the stored timing information.

4. The control system according to Claim 3,
wherein the timing information includes at least one of
a counter value, a random number that is not repeatedly used,
and a time when sending is executed.

5. The control system according to Claim 1,
wherein the computation processing unit generates a data
frame that includes the operation command data for the output
processing unit and the operation condition data for the monitor
processing unit and sends the generated data frame to the output
processing unit and the monitor processing unit.

6. The control system according to Claim 1,
wherein, after the monitor processing unit determines
whether abnormality is present, the monitor processing unit
stores a result of determination along with information that is
used for the determination.